

## SYNOPSIS



In the late evening of 10 April 2002, the fv *Radiant* was fishing about 45 miles north-west of the Isle of Lewis. While trying to free the fishing gear from an underwater obstruction (fastener), the vessel capsized and foundered at about 2225 UTC. An MAIB investigation began the following day.

*Radiant* became effectively anchored to the seabed when her port net snagged on a seabed obstruction. During hauling back, which was the usual procedure for getting free of a fastener, power was lost to the winches, the winches stopped and the winch brakes came on. There was now a heavy load on the port warp, causing a large list to port. The vessel rolled either side of the list, such that the port engine room air intakes started dipping below the waterline. The engine room flooded, and, eventually, the vessel capsized.

During the abandonment, one of the crew was lost, the other five were successfully rescued. Five of the crew were wearing lifejackets, but only one inflated properly. The crewman who was lost was wearing one of those that was defective.

Corrective action has already been undertaken on inflatable lifejackets, but a recommendation has been made regarding a better way to attach release units to gas cylinders.

The suppliers of the winch control system (the PTS Pentagon system) have been recommended to put more emphasis on the emergency start facility when training fishermen in its use. Users must be aware that they should use the emergency start if the hydraulics fail and this is putting the vessel in danger. The suppliers have also been recommended to enable the safety brake when configuring PTS Pentagon systems.

The port engine air intakes were not taken as a downflooding point when assessing the vessel's stability. For operational reasons this is not considered practical, so a recommendation on this has been made to the MCA. *Radiant* was fitted with powerful winches, which were capable of seriously compromising stability if fishing gear became snagged. For similar vessels, a notice should be shown in bold print, near the front of the stability book, warning skippers of this danger. A recommendation has been made to the MCA addressing this point.

*Radiant's* sister vessel *Resplendent* is fitted with port engine air intakes in a similar position. A recommendation has therefore been made to her owner to consider raising them and/or moving them further inboard.

The positioning of openings that affect watertight integrity, is an important part of a vessel's design. A recommendation has been made to the builders of *Radiant* and *Resplendent* to consider this carefully when they are constructing fishing vessels in the future.